

FIG. 1

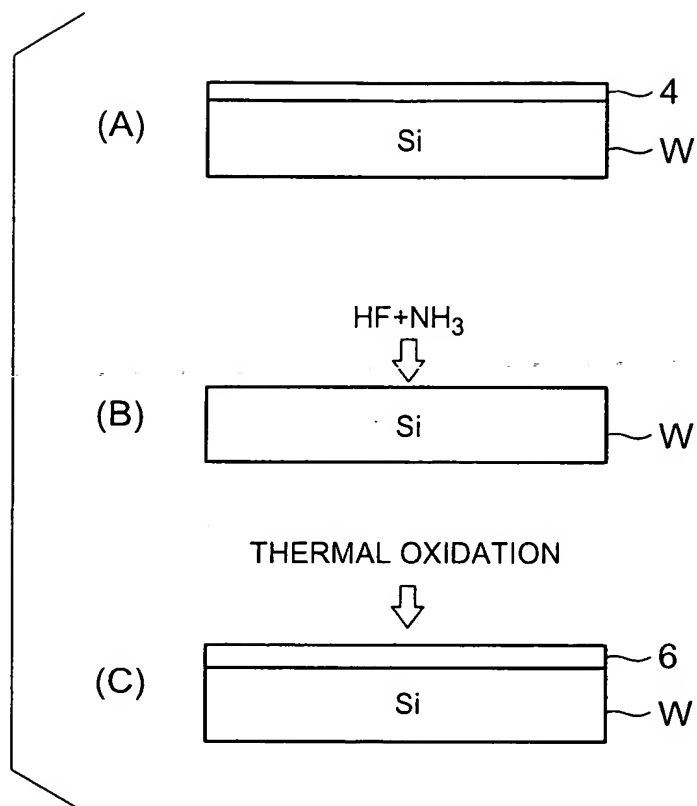


FIG. 2

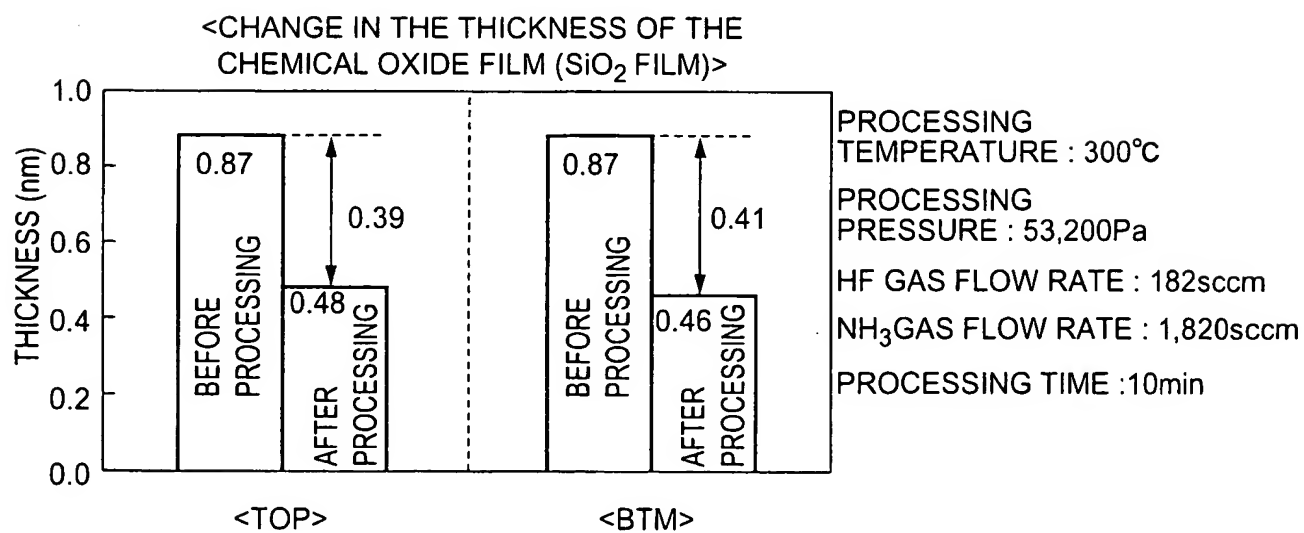


FIG. 3

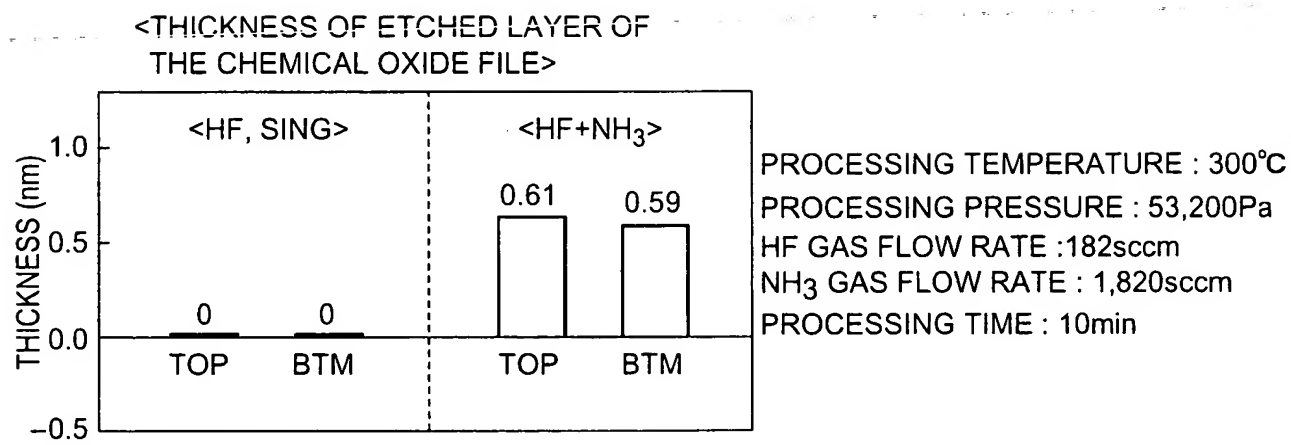


FIG. 4

&lt;ETCH SELECTIVITY FOR CHEMICAL OXIDE FILM&gt;

TEMPERATURE °C	PRESSURE Torr	HF sccm	NH <sub>3</sub> sccm	CHEMICAL OXIDE FILM		POLYSILICON FILM		SiN		TEOS (SiO <sub>2</sub> )		THERMAL OXIDE FILM (SiO <sub>2</sub> )	
				nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
100	VAC	182	1820	0.16		0	0	0.23		0.79		0.10	0
	7.6	1820	182	0		0		6.20		15.37		12.52	
	400	1000	1000	0		1.29		16.61		35.07		40.78	
	VAC	1820	182	0		0		0.14		0.53		0.08	
300	7.6	1000	1000	0.12		0	0	0.05	0	0	0	0.01	0
	150	182	1820	0.22		0	0	0.26		0.37		0.03	0
	182	1820	1820	0.42		0	0	0.61		1.19		0.27	0
	400	1000	1000	0.58		0	0	1.99		11.02		1.71	
	1820	182	182	0.61		0	0	3.22		93.90		2.28	
	VAC	1000	1000	0.16		0.04	0	0.01	0	0	0	0	0
400	7.6	182	1820	0.10		0	0	0.03	0	0.07	0	0	0
	400	1820	182	0.35		0	0	5.42		0.55		0.07	0
	VAC	1000	1000	0.18		1.35		0.08	0	0.57		0	0
600	7.6	182	1820	0.10		0.40		0.10		0.40		0.02	0
	400	1820	182	—		—		12.43		0		8.62	

&lt;1Torr=133Pa&gt;

FIG. 5

	TEMPERATURE °C	PRESSURE Torr	TIME min	HF (sccm)	NH <sub>3</sub> (sccm)	POLYSILICON FILM		SiN		TEOS		THERMAL OXIDE FILM		CHEMICAL OXIDE FILM	
						TOP	BTM	TOP	BTM	TOP	BTM	TOP	BTM	TOP	BTM
HF:NH <sub>3</sub> =1:10	200	150	10	182	1820	0	0	0.58	0.63	9.04	24.07	0.90	2.03	0.57	0.56
HF:NH <sub>3</sub> =1:20	200	150	10	91	1820	0	0	0.12	0.15	3.22	8.50	0.14	0.25	0.56	0.57
HF:NH <sub>3</sub> =1:50	200	150	10	36	1820	0.03	0.09	0.03	0.04	2.02	2.19	0.07	0.08	0.41	0.47

FIG. 6

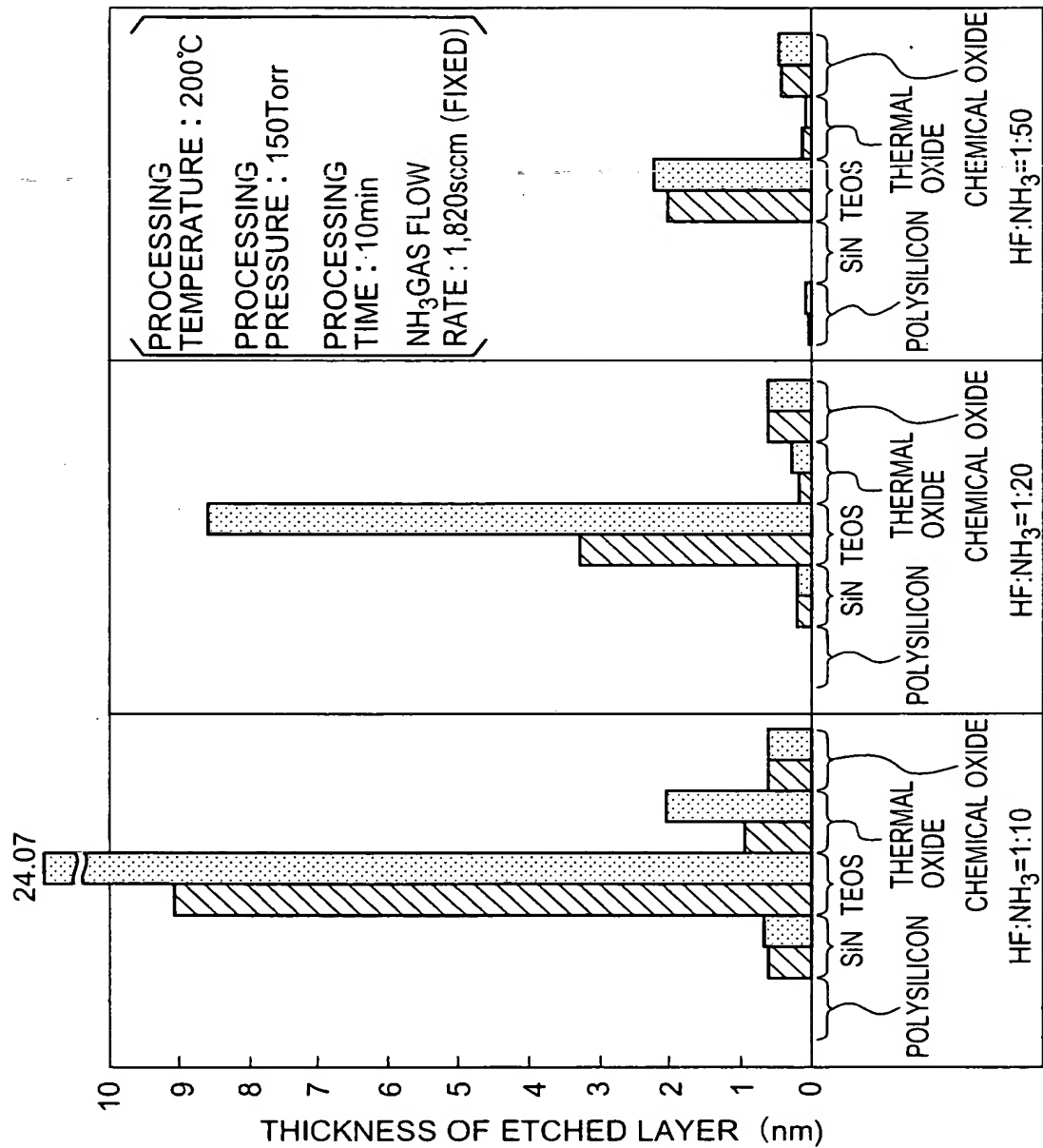


FIG. 7

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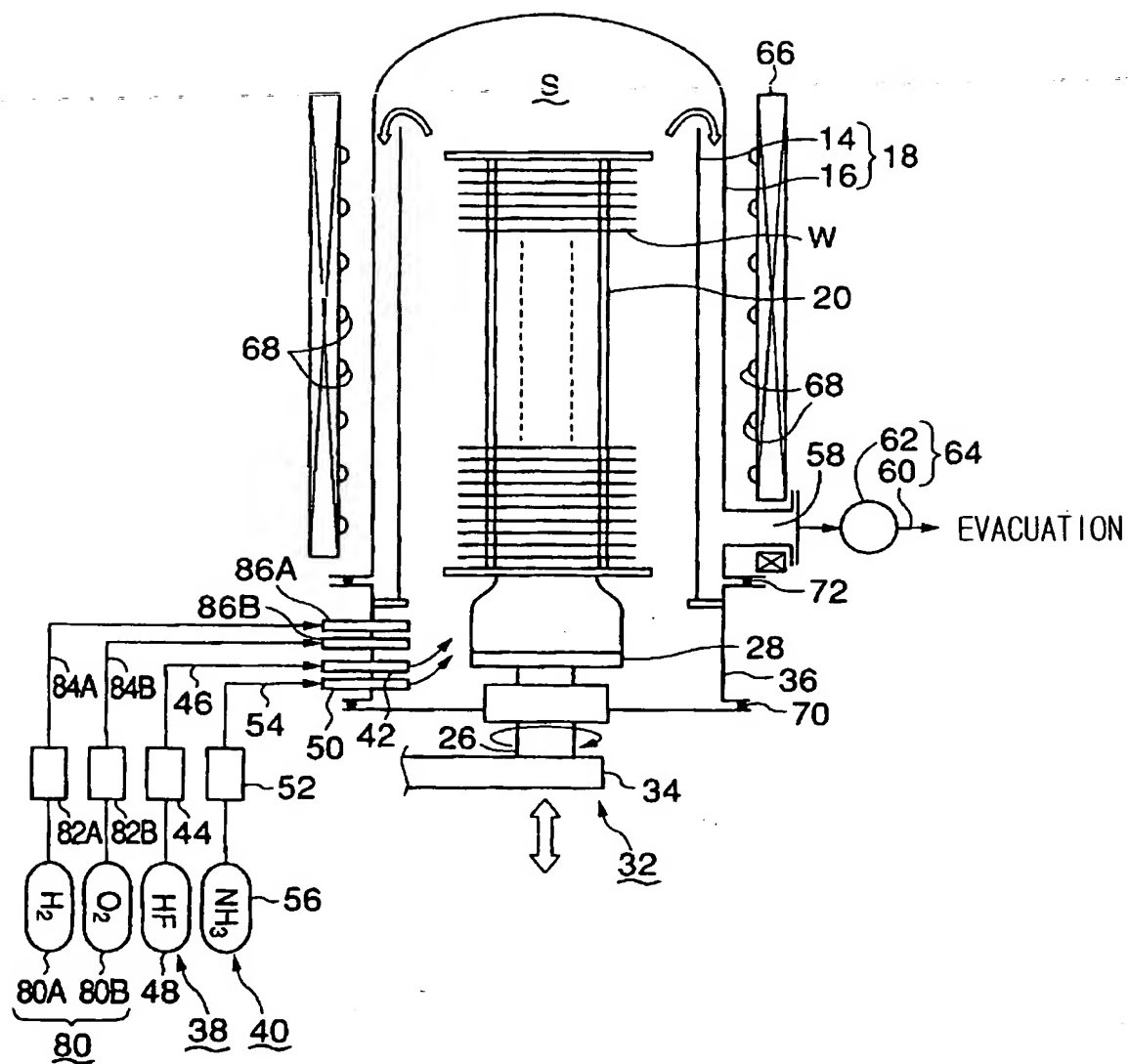


FIG. 8

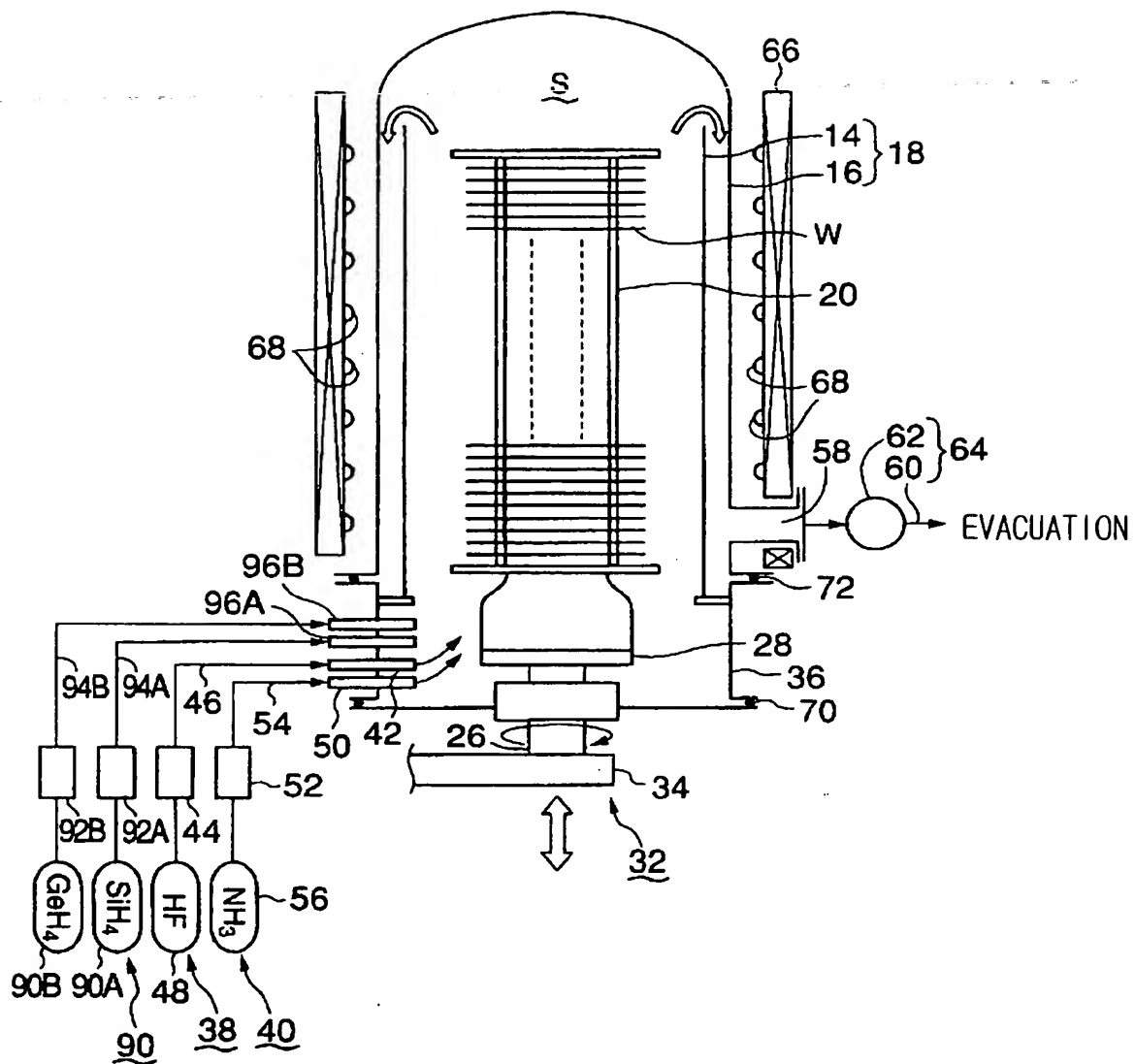


FIG. 9



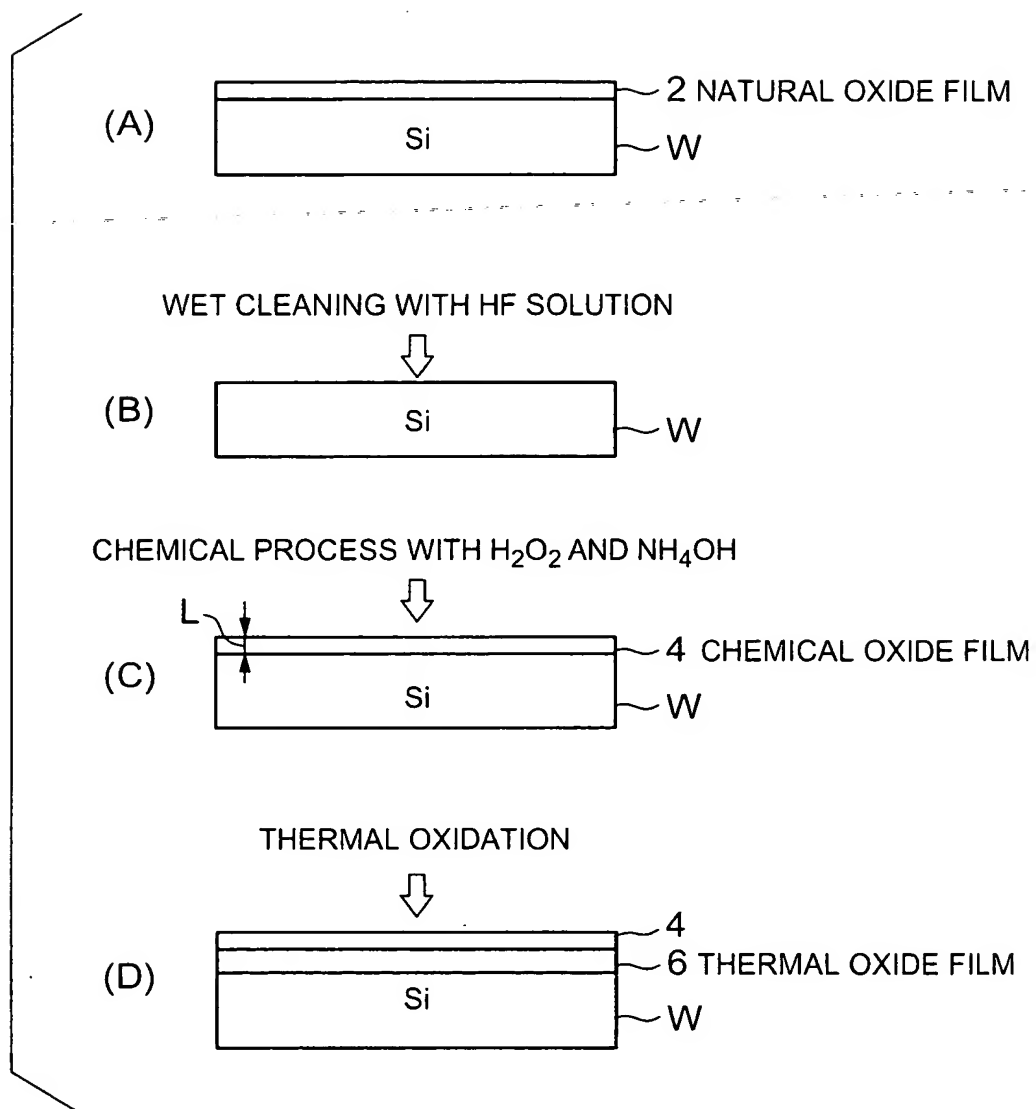


FIG. 10